NEC P Series

40” - 70” professional-grade, full high-definition LCD displays ideal for digital signage applications

Expand your messaging options with superior screen performance. The NEC P Series, featuring the 40” P402, 46” P462, 55” P551 and 70” P701, provides a first-class solution for your digital signage applications. Its high contrast, industrial-strength design and Enhanced Digital Signage Technology Suite (DSTS), which boasts more than 30 advanced features, make these displays ideal for 24/7 operation in even the harshest environments. These include airports, public information, healthcare, retail and other areas that require a combination of dazzling images and the highest level of display management. The built-in expansion slot future-proofs your display investment, allowing for seamless integration of NEC and third-party components. Plus, the capability to easily integrate touchscreen technology or protective glass opens these models up to even more applications, including wayfinding and high-traffic areas. The P701’s massive screen turns heads in corporate boardrooms as well as rental and staging applications. Advantages include a wide array of inputs, including DisplayPort, unrivaled control and communication options and enhanced video wall capabilities. The P551’s 120 Hz refresh rate reduces typical blur seen in fast-moving images and text that is noticeable at the standard 60 Hz refresh rate. It also shows increased definition between images, giving you more lifelike viewing.

DSTS Digital Signage Technology Suite

Highlights

- IMPROVED MECHANICAL DESIGN*
  - SLIMMER DEPTH
  - INTEGRATED SPEAKER
  - OPS & CURRENT SLOT SUPPORT
- DIGITAL SIGNAGE TECHNOLOGY SUITE
- INTEGRATED THERMAL PROTECTION
- SEALED PANEL DESIGN
- ENHANCED VIDEO WALL CAPABILITIES
- ECO-FRIENDLY FEATURES
- BUILT-IN EXPANSION SLOT
- EXTENSIVE CONTROL, DIAGNOSTICS & COMMUNICATION
- REAL-TIME CLOCK/ROUND-THE-CLOCK SCHEDULING
- CABLECOMP+™ TECHNOLOGY
- BUILT-IN TUNER (-AVT MODELS)

* available on select P Series models

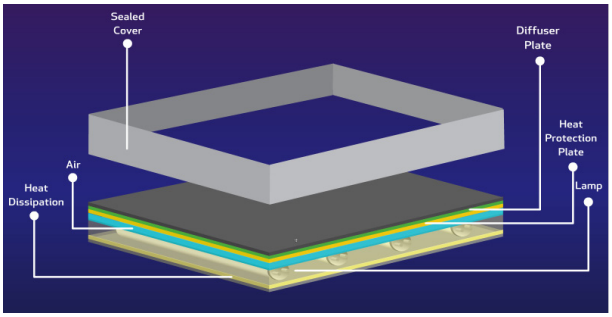
P Series Key Features

24/7 full-HD commercial SPVA panels

The professional-grade construction of P Series panels contributes to 24/7 usage, an overall longer panel life, lower likelihood of mura effect from localized heat, virtually no image retention and the ability to use in landscape or portrait orientations. The panel's thermal protection starts with an extra thermal layer on the display panel to diffuse heat, followed by multi-fan-based technology specially designed to work in both landscape and portrait modes and be controlled locally or remotely. Internal temperature sensors control self-protective circuits, while special self-diagnostics communicate the status of the thermal characteristics.

P Series panel construction includes:

- Thermal dissipation plate, placed behind the LCD lamps, conducts heat equally across the plate, preventing "hot spots" on the LCD
- Backlight layer (or lamps) determines the brightness of the display but is also a key heat component
- Wider air layer allows for increased airflow and improved heat dissipation
- Heat protection plate, located between the LCD panel and the lamps, provides added heat protection to the panel
- Panel is sealed, preventing contaminants like dust, grease or steam fromdamaging the panel*



Green technology helps lead to a lower total cost of ownership

Eco-friendly features are aplenty in the P Series, decreasing energy consumption, lowering your expenses over the lifecycle of the display and contributing to your environmental consciousness. These include:

- **Ambient light sensor** ensures consistent brightness no matter the lighting conditions, while allowing the user to set the brightness level to a pre-determined lower level in order to automatically compensate and reduce the brightness, thus decreasing power consumption
- **Carbon footprint meter** helps track and calculate the conservation of green gas emissions in real time
- **Real-time clock/round-the-clock scheduling** allows for advanced scheduling of monitor powering up/down, increasing panel lifetime, reducing power consumption and saving the time and expense of finding and purchasing a third-party scheduling solution
- **ENERGY STAR 5.0**** is proudly offered for most P Series displays, which meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy, helping you save money and reduce greenhouse gas emissions

Built-in technology to support video wall configurations

Select P Series displays' thin-bezel design and enhanced video wall capabilities allow you to expand your messaging options. Technologies include:

- **TileMatrix™** allows you to create video walls (up to 100 displays in a 10x10 matrix)
- **TileComp™** works in tandem with TileMatrix to compensate for the bezel width and create a more seamless video wall
- **Copy function** allows the user to apply the settings from one display to all others in the RS-232 daisy chain, reducing setup time and saving money
- **Individual and Group ID functions** allow users to control settings for a defined individual display or group of displays within a video wall

- **Optional Display Wall Calibrator Kit (KT-46UN-CC; pictured)** provides a quick, accurate and easy-to-use means of automatically matching all displays in color and brightness to create uniformity across the video wall

*use under the environmental conditions noted in the specifications and user's manual
**available on select models

Full connectivity and control with the option for expansion in every display

The P Series touts the industry's most extensive control, diagnostics and communication, providing the highest level of remote display management. These include:

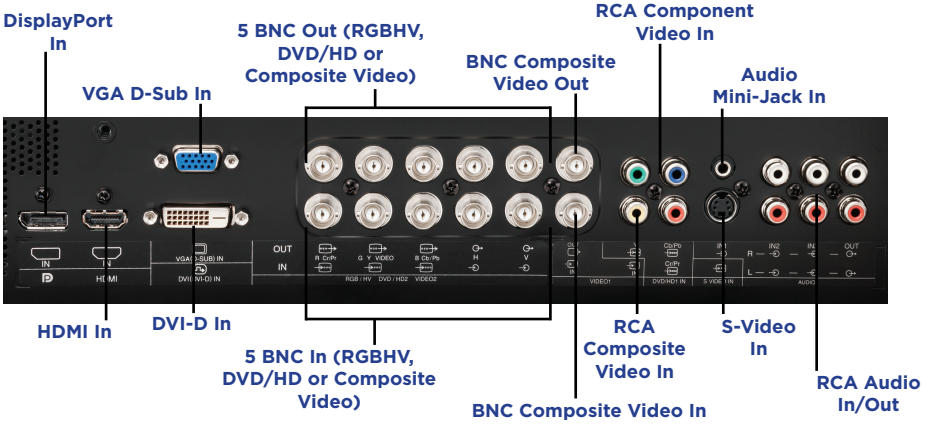
- RS-232 enables multi-display control and daisy chain, allowing for individual and group-addressable control, and simple, effective setup and monitoring of the display
- Ethernet connectivity adds the same RS-232 control plus automatic email notification for diagnostic purposes
- NaViSet™ software offers an intuitive graphical interface, allowing for easy adjustment of display settings via mouse and keyboard. NaViSet Administrator provides all the advanced control to remotely located IT professionals.
- DDC/CI standard allows for PC control of the display based on the VESA command set
- CableComp+ uses a digitized signal delay circuit to automatically compensate for each red, green and blue cable's length and video signal delay, ensuring sharp image reproduction despite long cables and low output level*
- Expanded connectivity with digital loop through (DVI-D and DisplayPort)**

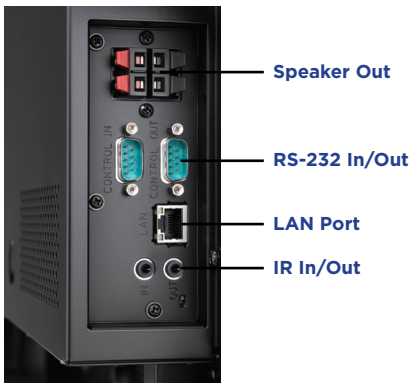
A built-in expansion slot future-proofs your display investment, allowing for seamless integration of optional NEC and third-party components, including:

- Open Pluggable Specification (OPS)** is the first industry-wide standardization in option slots, simplifying installation, use and maintenance of digital signage.
- HD-SDI card (SB-L007KK): Achieve broadcast-grade video with this internal card that provides an HD-SDI input without using additional space or power.
- Single board computer (NET-SBC-01/02/03/04): This option provides for a seamless internal PC solution that is both cost-efficient and flexible. It eliminates the need for external cabling, mounting and power supply, providing for a clean look that simplifies installation and reduces maintenance.
- DVI daisychain (SB-L008WU)**: Loop in and out a single digital video signal to up to nine displays with this option, which eliminates the need for external distribution equipment and power supply. These benefits make the board ideal for video banners, ribbons and walls in addition to back-to-back installations.
- Digital IP tuner (MPD-DTi): This IPTV card enables you to stream up to 1080p content directly to the display as well as ATSC/NTSC/Clear QAM signals. Other features include auto scan, DTV signal strength, parental controls, closed caption and network settings—all adjustable from the display.
- CAT5 receiver: Using NEC-approved third-party solutions, you'll be able to safely send your video over longer distances.

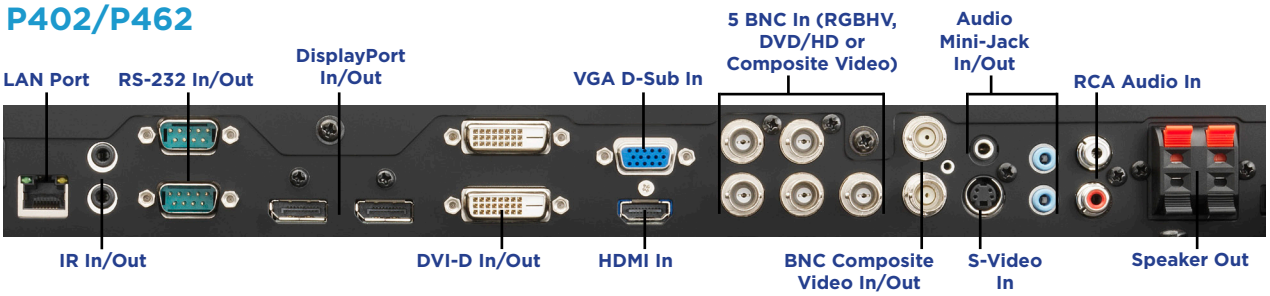
The P Series sets the standard for connectivity. Improved input options include quick input change, customized detection and naming. See below for the complete list of P Series input/output terminals.

P551/P701





P402/P462



*use under the environmental conditions noted in the specifications and user's manual
**available on select models

Specifications for P402/P462/P551/P701

MODEL	P402	P462	P551	P701
LCD MODULE				
Panel Technology	SPVA (P-DID)			
Viewable Image Size	40"	46"	55"	70"
Native Resolution	1920 x 1080			
Brightness (Typical)	500 cd/m²			420 cd/m²
Contrast Ratio (Typical)	3000:1	3500:1	3000:1	2000:1
Viewing Angle	178° Vert., 178° Hor. (89U/89D/89L/89R) @ CR>10			
Response Time (G-to-G)	8ms			
Aspect Ratio	16:9			
Active Screen Area (W x H)	34.9 x 19.6 in. / 885.6 x 498.2mm	40.1 x 22.5 in. / 1018.1 x 572.7mm	47.6 x 26.8 in. / 1209.6 x 680.4mm	61 x 34.3 in. / 1549 x 871.6mm
Orientation	Landscape/Portrait			
Displayable Colors	More than 16.7 million			
CONNECTIVITY				
Supported Video Formats	720 x 400, 640 x 480, 800 x 600, 832 x 624, 1024 x 768, 1280 x 1024, 1600 x 1200, 1280 x 768, 1360 x 768, 1920 x 1080			
PC/Mac Signal Compatibility	Yes			
Input Terminals				
Digital	DisplayPort, HDMI, DVI-D			
Analog	VGA 15-pin D-sub, 5 BNC (RGBHV, DVD/HD or Video), S-Video, BNC Composite		VGA 15-pin D-sub, 5 BNC (RGBHV, DVD/HD or Video), RCA Composite, BNC Composite, RCA (Y, Cb/Pb, Cr/Pr) Component, S-Video	
Audio	RCA Audio, Stereo Mini-Jack (2), DisplayPort Audio, HDMI Audio		RCA Audio (2), Stereo Mini-Jack, DisplayPort Audio, HDMI Audio	
External Control	RS-232C, LAN, IR Remote, DDC/CI		RS-232C, LAN, IR Remote, DDC/CI	RS-232C, Ethernet (RJ45), IR Remote, DDC/CI
Output Terminals				
Digital	DisplayPort, DVI-D		NA	
Analog	BNC Composite		5 BNC (RGBHV, DVD/HD or Video), BNC Composite	
Audio	Stereo Mini-Jack, External Speaker Jack (2)		RCA Audio, External Speaker Jack (2)	
External Control	RS-232C, IR Remote			
Digital Tuner	P402-AVT	P462-AVT	P551-AVT	P701-AVT
POWER CONSUMPTION				
On (Typical)	145W	155W	280W	600W
ECO Mode Standby	<1W		<0.5W	<0.7W
PHYSICAL SPECIFICATIONS				
Bezel Width (L/R, T/B)	0.61 in./0.61 in., 0.61 in./0.61 in. ; 15.5mm/15.5mm, 15.5mm/15.5mm	0.65 in./0.65 in., 0.65 in./0.65 in. ; 16.5mm/16.5mm, 16.5mm/16.5mm	0.8 in./0.8 in., 0.8 in./0.8 in. ; 20.3mm/20.3mm, 20.3mm/20.3mm	2.5 in./2.5 in., 2.5 in./2.5 in. ; 64mm/64mm, 64mm/64mm
Net Dimensions (without stand; WxHxD)	36.2 x 21.0 x 4.1 in. / 919.7 x 532.2 x 103mm	41.6 x 24.0 x 4.1 in. / 1055.4 x 608.6 x 103mm	49.2 x 28.4 x 5.9 in. / 1250.2 x 721.1 x 150.1mm	66.1 x 39.5 x 7.8 in. / 1680 x 1004 x 198mm
Net Weight (without stand)	45.9 lbs. / 20.8 kg	52.5 lbs. / 23.8 kg	88.2 lbs. / 40 kg	211.6 lbs. / 96 kg
VESA Hole Configuration	300 x 300mm (4-hole)		400 x 400mm (4-hole)	
ENVIRONMENTAL CONDITIONS				
Operating Temperature	41-104°F / 5-40°C			
Operating Humidity	20 - 80%			
Operating Altitude	9843 ft. / 3000m			
LIMITED WARRANTY	3 years parts and labor, including backlight*			
ADDITIONAL FEATURES	Advanced thermal capabilities; Advanced cooling system; Sealed panel design; Expansion slot; Thin bezel; TileMatrix (10x10); TileComp; Separate group/Monitor ID function; CableComp+ ; Ethernet Control and Communication; RS-232 Control and Communication; Landscape/portrait capable; Carbon footprint meter; AccuBlend; Plug and Play (DDC/CI, DDC2B); Scheduler (w/ real-time clock); Sharpness/ softness adjustment; Screen saver function; Ambient light sensor (AmbiBright); 6-axis color adjustment; Metal rear cabinet; POP; Side-by-Side; Kensington lock; 10-bit gamma; Handles; Touch- and protective screen-ready; Variable picture modes; Advanced video settings (Noise Reduction, Adaptive Contrast); Input labeling; Backlight adjust; Aspect ratio control; Built-in speakers; OPS/Expansion slot		Advanced thermal capabilities; Sealed panel design; Expansion slot; Thin bezel (P551); 120Hz Panel; TileMatrix (10x10); TileComp; Separate group/Monitor ID function; CableComp+ ; Ethernet Control and Communication; RS-232 Control and Communication; Landscape/portrait capable; Carbon footprint meter; AccuBlend; Plug and Play (DDC/CI, DDC2B); Scheduler (w/ real-time clock); Sharpness/ softness adjustment; Screen saver function; Ambient light sensor (AmbiBright); 6-axis color adjustment; Metal rear cabinet; POP; Side-by-Side; Kensington lock; 10-bit gamma; Handles; Touch- and protective screen-ready; Variable picture modes; Advanced video settings (Noise Reduction, Adaptive Contrast); Input labeling; Backlight adjust; Aspect ratio control; TAA-compliant (P701)	
SHIPS WITH	Power cord; VGA cable (Mini 15-pin D-sub); Wireless remote control; Batteries; Cable cover; CD-ROM (user manual); Clamp; Screws			
OPTIONAL ACCESSORIES				
NEC	Speakers (SP-4046PV); Stand (ST-4020 or ST-4620); Single Board Computer (NET-SBC-01/02/03/04); External Single Board Computer (TNETPC-ION); Internal HD-SDI Card (SB-L007KK); DVI Daisychain (SB-L008WU); Digital IP Tuner (MPD-DTi); External TV tuner (TVBOX); Wall Mount Kit (WMK-3257); Accessory pack for Wall Mount Kit (MIS513); Display Wall Calibrator Kit (KT-46UN-CC); OPS with Intel Core i5 (N8000-8830), OPS with AMD Dual Core Fusion, 160GB Hard Drive, W7P (SB-02SC-1); OPS with AMD Dual Core Fusion, 32GB SSD, W7P (SB-02SC-2); OPS with AMD Dual Core Fusion, 160GB Hard Drive, No OS (SB-02SC-3); OPS with AMD Dual Core Fusion, 32GB SS, W7P (SB-02SC-4); OPS Adapter (SB-02AM); Adaptor Mount Kit (AMK-P4046)		Display Wall Calibrator Kit (KT-46UN-CC); Single Board Computer (NET-SBC-01/02/03/04); External Single Board Computer (TNETPC-ION); Internal HD-SDI Card (SB-L007KK); DVI Daisychain (SB-L008WU); Digital IP Tuner (MPD-DTi); Rear-Mounted Speakers (SP-RM1); Stand (ST-5220 for P551 and ST-701 for P701); External TV tuner (TVBOX); Wall Mount Kit (WMK-3257); SpectraView$_{II}$ Color Calibration Kit (SVII-PRO-KIT)	

* Warranty restrictions apply. Contact your representative for details.

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